R16

SET - 1

II B. Pharmacy I Semester Supplementary Examinations, March - 2021
PHARMACEUTICAL UNIT OPERATIONS-I

Time: 3 hours   Max. Marks: 70

Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B)**
2. Answering the question in **Part-A** is Compulsory
3. Answer any **FOUR** Questions from **Part-B**
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PART –A

1. a) What is pressure head? How it is calculated?   (2M)

    b) Write the advantages of diaphragm pump.   (2M)

    c) Differentiate filtration and centrifugation.   (2M)

    d) Write the importance of crystallization in pharmacy.   (2M)

    e) Define humidity and relative humidity.   (2M)

    f) Write the importance of glass lined equipment in pharma industry.   (2M)

    g) What are possible industrial hazards?   (2M)

PART -B

2. a) State and explain Bernoullis theorem.   (8M)

    b) Describe the construction and working of pitot tube. Give relevant equations.   (6M)

3. a) Describe the construction and working of a turbine pump.   (8M)

    b) Differentiate fans and blowers and give their applications.   (6M)

4. a) Write a note on factors affecting rate of filtration.   (7M)

    b) Explain the theory of centrifugation.   (7M)

5. a) State and explain Mier's theory of super saturation and give its limitations. (8M)

    b) What is caking of crystals? How it is prevented.   (6M)

6. a) Describe psychometric chart.   (7M)

    b) Write the principle of air conditioning.   (7M)

7. a) State the properties, advantages and disadvantages and applications of stainless (8M)
        steel.

    b) Write brief note on dust hazards.   (6M)